Wakefulness

I have thus treated upon all the diseases of the brain in which general or local oppression or prostration take place, & in which no reaction, or partial reaction only takes place. We proceed next to those ~~in which~~ morbid states of the brain in which local excitement, & general reaction take place. The ~~first of these is~~ former are wakefulness, vertigo, cutaneous head ache, & the latter are convulsions or Epilepsy.

On Wakefulness.

The limits of natural sleep are different in different people, and in the different periods of life. Many instances are recorded of persons passing months, & years ~~[and one of a person passing nearly his whole life which extended to 70 years]~~ with but a few hours sleep in the fortnight and yet enjoying good health. 88th Greek in his surgery relates an instance of a Spaniard who he traced in the age of 20 & 70 never slept but 1/4 of an hour in the four & twenty without ~~feeling~~ being in the least incommoded by it. This Dit during this ~~time~~ long period consisted only of fish - Chocolate & a few vegetables. In fevers and in certain diseases of the

V It ~~disease~~ appears in different forms.
1 In a quiet state of the body and mind in which case it is sometimes attended with pleasurable sensations. 2 In great restlessness, or jactations of the whole body from side to side or to different parts of the bed. 3 In little short jerkings of the muscles of the limbs called by the good women the creeps.

I have called it a disease, ~~but~~ for I believe it is often accompanied with morbid action in the brain. This is evident in the pulse which is not only preternaturally full, but tense. But it ~~is~~ often takes place ~~in~~ from an excess of, or Deficiency of natural excitement in the brain. whether it arise from ~~a disease, or~~ the former or latter cause is

Nerves & brain there is often an absence of sleep for days and weeks without any perman-ent injury being done to the system by it. Many facts of this kind are mentioned by Dr Haller in his Elements of Physiology. ~~But in ~~ ~~wakefulness~~ However happily the system may accommodate itself to these extraordinary degrees of vigilance, it is generally a disease when it exceeds the ordinary habits of most people, that is when it exceeds from 06 to 08 hours in the four and twenty. It is ~~common an~~ always an sign of the system ~~disease~~, and when neglected often induces madness, or more dangerous and fatal diseases of the brain. V

Wakefulness is induced by

I Corporeal, ~~and~~

II Mental Causes. ~~The I or Corporeal~~

III. By a mixture of both corp & mental causes.

V accompanied with great epileptic determination. 10. ~~Great~~ pregnancy. I have known wakefulness produced by it six weeks before parturition. 11 pain from all its causes. 12 a ~~hard~~ soft bed after being accustomed to a hard bed.

The corporeal causes which reduce the excitement below the sleeping point are p:4

I The Corporeal Causes act by inducing excitement beyond the sleeping point, or ~~causes~~ they produce a diminution of excitement below the sleeping point with such an accumulation of excitability, as to render the brain so irritable from stimuli as upon its itself at the point of sleep. These corporeal causes which elevate the brain beyond the sleeping point are 1 strong tea and coffee 2 strong drink whether of ardent or fermented liquors, in moderate or small quantities. 3 a small dose of opium. 4 the Peruvian Bark. Six Common doses of this medicine induced it for three nights and days in a lady in this city. 5 a heavy supper, or aliments, or drinks not habitual to a patient. 6 noises of all kinds of an unusual nature. 7 ~~Cold~~ exquisite heat. 8 coldness of any part of the body, particularly the feet, & a hard, ~~or too soft a~~ bed. 9 a fever

which afflicted

The wakefulness, ~~of~~ his celebrated Rhapsean ~~which afflicted him~~ in the evening of his life was brought on by ~~his sense~~ undue exercises of his Understanding. The passions which prevent sleep ~~are~~ by unduly exciting the brain are love, envy, resentment - malice.

The other mental irritants are

~~accompanied with great apoplectic death~~ =

~~=assaulted~~ 1. The sudden solution of a fever leaving the system in a highly excitable state. ~~11 Raise from all its causes~~ 2

2. The want of labor, study, or exercise during the day, ~~and~~ 3 fatigue from an undue proportion of ~~[illegible]~~ all of them. 4 Protracted wakefulness induced by pleasure or necessity, ~~and~~ gamblers are sometimes ~~[illegible]~~ sleepless after spending two or three nights at a gaming table. ~~The~~ ~~[illegible]~~ Dr Beide of Dublin died of madness induced wholly by his losing four or five nights sleep in attending upon the duties of his ~~[illegible]~~ hysterical profession. ~~14 Pregnancy I have known an instance of wakefulness occurring for six weeks before parturition.~~

II The mental causes of wakefulness are

1. The undue exercise of the understanding, and ~~or~~ ~~[illegible]~~ overstimulating the brain. and ~~[illegible]~~ thinking ~~[illegible]~~ The former are most apt to induce it when begun in the evening, or just before going to bed.

1 Love especially when unsuccessful. Dr Home in his principia medicina describes this effect of love in the following elegant words. "Somnus erises vocatus, usque ad diversem desinit."

2 Fear. This is often induced by cats, rats, the dread of robbers, and by high winds. Dr

3 Grief.

2 Interesting and vexatious business of all kinds particularly law suits, and politicks.

3 Guilt preying upon the Conscience. Wakefulness is so often brought on by ~~[illegible]~~ Capt

of these ~~Cases~~ Cases that ~~prudent~~ cautious men consider it as a ~~[illegible]~~ of suspicious circumstance in a man's Character when he parts the greatest part of his nights in his bed without sleeping. "Let me have men about me ~~[illegible]~~ says Cæsar ~~that are sleek headed~~ in the play of that bears his name ~~[illegible]~~ "that are sleekheaded" men that sleep at nights" "Cæsius thinks too much". The mental causes which render the brain below the sleeping point

III I have said Wakefulness is induced by a mixture of corporeal and mental causes. This occurs ~~[illegible]~~ in old age in which ~~the~~ excitability in the ~~[illegible]~~ body, and under mind, induced the loss of the excitement of

both of them. There is scarcely any bodily im-
-pression so feeble, or mental uneasiness so
trifling that does not at times bring on
wakefulness in Hypochondriacs. Even the ~~weight~~
~~of a~~ grasshopper is a burden to their bodies.

The Brain in all these cases of wake-
-fulness is always in one of two states, exci-
-ted above, or depressed below the sleeping
point. ~~Wakefulness~~ In the former case
~~as a Bleeding~~ ~~this is always accompanied~~
the pulse is tense, or full, without tension,
~~or Fever~~ there is a flushing in the face &
a red, or watery eye, without any morbid
state of the pulse. The Bleeding Remedies here should be repeated,
until those signs of undue excitement are
removed. I have used this remedy often, &
always with success in this disease. Where
there is reason to believe the disease is con-
-fined

chiefly, or wholly to the brain; Cups or leeches should be preferred to the lancet.
2 Lenient purges. 3 Low Diet, and particularly abstinence from tea, Coffee, ardent & fermented liquors. 4 no Supper. 5 Cold applications to the head and warm applications at the same time to the feet. Sleeping without a Night Cap in cold weather in persons who have been accustomed to wearing one will frequently admit of as much Cold to the head as is required. The Bishop of Nismes was cured by this simple remedy after using many others to no purpose. His head was bald with age.
6 Profound Darkness and Silence. 7 Lying on the back. This acts by advancing the action of nearly all the muscles of the body. 8 Blisters first to the Ancles and afterwards to the neck. 9 Previous ~~exercise~~ labor or exercise during the Day, or just before bed time. Walking the floor for half an hour before lying down in bed is often an

anodyne ~~to~~ in wakefulness from undue excitement of the brain. It is the more necessary and useful, if the ~~evening~~ day has been passed in study at a desk. It acts by abstracting accumulated excitement from the brain, and throwing into the limbs, & thus equalizing it. 10 In that state of wakefulness in which there is restlessness, or jactation of the body, or those little jerkings of the limbs which are called Crevils, great advantages have been derived from ~~jumping~~ throwing off the bed clothes and exposing the body to the cold air. The system when depressed by the cold, reacts equably, and thus by equalizing excitement, induces sleep. But if this should be ineffectual, the patient should jump ~~of~~ out of his bed, and walk undressed for five or six minutes up & down his room.

Jm

12 V: applying bottles with hot water, or hot brick to the feet. They abstract excitement from the brain, and thus equalize it.

this way Dr Franklin often induced, and obtained sleep. I have often found the ~~bed~~ ~~it~~ benefit from ~~of~~ this remedy when imposed upon me from neuralgia. when called out of bed in this wakeful disease I have seldom failed to drop asleep immediately after returning from visiting my patient. ~~If sitting up~~ ~~in an arm chair, or~~ lying with the head elevated above the body, or ~~in a~~ sleeping in a half bent posture. ~~Dr Tho~~ I had a patient a few years ago in 1808 who could sleep only in his arm chair. The blood was restrained by its gravity in this state of the body from over stimulating the brain.

13 Concentrating the mind upon some one subject. Counting a 100 backwards – or thinking of a flock of sheep leaping in succession over a fence, or of a large wheat field just before harvest waving before a gentle breeze of wind.

The excitement of the brain is thus gently worn down to the sleeping point. By exposing the ears to certain simple sounds which do not excite any ideas in the mind, and which reduce excitement by the stimulus of action. These sounds are the Aeolian harp, or the dropping of water into a basin, or a monotonous human voice either in singing or speaking. You have all presumed heard of the man who was afflicted with this disease to whom all the common remedies for inducing sleep had been given in vain. One of his neighbours who had often seen him sleep in Chusetts advised his friends to send for the parish priest to preach in his sick room. This priest probably had a monotonous voice, which is always, whether in a preacher, a pleader, or a reader, of an anodyne nature. All these simple impressions upon the ears act by lessening

V 16 Dr Bonet commends obliging persons who are obstinately wakeful, to stand until they begin to nod. It appears to be a ~~cat~~ rational remedy.

17 If from cold feet or other body, it arise, a thorough warming of both before going to bed.

Down its excitement.

15 Dr Willis relates a Case of Hysterick Wakefulness which always went off, as soon as a belching of Wind took place from the Stomach of his patient. what would be the effect of creating a similar nervous Action in the Stomach by means of an emetic or of nauseating doses of medicine?

Let us next inquire into the Remedies which are proper to cure wakefulness where the brain is below the sleeping point.

This state of the brain may be known by attending to its Causes. The more protracted they have been in their Operation, the more probably they have produced it. The pulse in this state of the System is weak, and the face & eyes discover none of the marks of preternatural or undue excitement in the brain.

The Remedies in this State of the Disease

v Dr Jackson tells us it has often induced
sleep when applied to the soles of the feet.

1 Opium ~~Begin~~ Begin with small doses. Five drops will sometimes be more effectual in inducing sleep than 30, 40, or 50. 2 a tincture or lea, or extract made of hops, or 3 a bag of hops placed under the head. This medicine often induces sleep where Opium fails, and wholly from its being a more feeble Anodyne.

4 Asafoetida - in tincture or pills. I have known two pills made of this Gum act as an anodyne, when Opium failed in its ordinary dose of having that effect. ~~Seems~~ acts chiefly upon the nerves.

5 a Light Supper. 6 a draught of porter or a glass or two of Wine taken at bedtime.

7 Tea or Coffee of a moderate strength taken in the evening. All these substances induce sleep by elevating the system to the sleeping point. 8 The warm Bath, or the pediluvium just before bedtime.

of Light, either of a Candle, or of the moon or of the morning. It is because the light of the morning elevates the System to the point of Sleep. That many persons fall asleep at the Dawn of Day, who have passed the whole night in a state of Distressing Wakefulness. I mentioned formerly an instance of a Lady in this City who was unable to sleep without the Glimmer of the light of a Candle in her room.

to a customary hour. The inhabitants of the neighbourhood of the falls of the Nile are unable to sleep when they go abroad beyond the reach of its noise. I know of a Watchmaker in this City who was unable to sleep when ever he slept in a room where he did not hear the ticking of a number of watches. He had been in the practice of taking all the watches in his Shop into his bed room every

right to prevent other being stolen.

11 Throwing off the bed clothes & creating a reaction of the system from the action of cold. — ~~which~~ This reaction by transcending the feeble action of the system, elevates it to the sleeping point.

12 Jumping out of bed and walking rest of the floor. This remedy ~~acts by~~ acts when the brain is unduly excited by attracting its excess of excitement to the lower limbs. But in the state of wakefulness now under ~~consideration, the limbs are sometimes in the exercise of walking throws the excitement~~ ~~when the is between pain or excitement,~~ consideration, the limbs are sometimes in a plus, while the brain is in a minus state of excitement. In this case the plus excitement of the limbs is thrown into the brain ~~whereby~~ which induces sleep by equalizing ~~good bed~~ excitement. ~~and~~

~~Sleep~~

13 Being rocked in a cradle, or in a suspended bed. This increases the

determination of the blood to the brain &c thus brings on sleep.

14 Placing the body upon a small stone, or any other round body, ~~and rising~~ so as the head towards its circumference, and then imparting to it a rotatory motion. Dr Brindley relates the case of a man who was cured of wakefulness by this remedy. It soon creates the healthy apoplexy upon which sleep depends.

15 Going to bed precisely at the same hour, as every night, and rising at the same hour every morning.

16 Sleeping upon a hard bed, where a patient has been accustomed to it. Bonet mentions the case of an Officer who returned to spend a winter with his family after a Dissatisfied campaign. He was unable to sleep for several weeks. At length he was advised ~~by a physician~~ to lie down upon some straw upon a ground floor.

17 Riding in a Carriage. It was thus indeed in a lady in this city after all the usual remedies had been used to no purpose.

sleep was thus immediately induced.

18 Great pains should be taken never to com-
municate any thing to persons afflicted with
this disease ~~that should be made~~ just before
bed time that is ~~of an~~ interesting ~~or unless~~ whether
of a pleasant, or disagreeable nature. Even
a trifling pair of cards as often prevented sleep
if told just before bed time.

19 As there is always a great deal of solicitude
in a patient about the issue of this disease,
it will be highly ~~useful~~ proper to encourage them
to expect a cure. I well recollect the consola-
tion the late Dr Woodhouse derived when
afflicted with this disease upon my telling
him that Dr Boerhaave had passed six weeks
without sleep and yet finally recovered. His
wakefulness was brought on by intense study.

In the use of all the remedies that
have ~~been~~ been mentioned, to elevate the

the System to the sleeping point, recollect the rules formerly given when a Disease affects two or three of the different Systems of the body. They must all be reduced to the same Grade of debility, or in other words slumbered, or ~~our~~ Stimulants will not only be ineffectual, but increase the Disease. Watch the blood vessels ~~[illegible]~~ chiefly; you can do little to any good purpose in diseases of ~~these or four systems~~ the brain ~~the~~ nerves, and muscles until you first regulate ~~their~~ the actions of the former, and bring them into harmony with the latter. ~~The great~~ Success in ~~Least of~~ the practice of ~~medicine~~ physic depends chiefly upon attending to this rule, and afterwards combining the medicines that act primarily and as it were specifically upon the different Systems in their equally debilitated state. —